

Scenario for the pressurization of the LH2 absorber window

The measurement will be performed with chosen methods:

- voltage measurement,
- resistance (2wires or 4 wires),

and the acquisition :

1. Keithley (static measurements),
2. ADC card (dynamic measurements),

In any case, you should registered more then 10 value per pressure conditions.

Steps:

1- Cycling: measurement of the strains and displacements for :

- 0 PSIG
 - 2.90 PSIG
 - 5.80 PSIG
 - 0 PSIG
- (Repeat 3 time)

2- Measurements of the strains and displacements for :

- From 0 to 7.25 PSIG with increments of 1.45 PSIG
- From 7.25 PSIG to the rupture with increments of 1.45/2 PSIG

If you want to stay in the elastic mode of the aluminum window, then don't go further then 20 PSIG.

If you refer to

http://tspc01.fnal.gov/darve/mu_cool/pressuretest/Instrumentation/DAQ_organigram.doc

then the pressure P1 max = 7.25 PSIG

The following table can be filled with the preliminary data:

	Load (PSIg)	(Mpa)	Voltage (mV)	strain radial	UY	Time start	Comment
	0						
1	2.5						
2	5.0						
3	7.0						
4	8.0						
5	9.0						
6	10.0						
7	11.0						
8	12.0						
9	13.0						
10	14.0						
11	15.0						
12	16.0						
13	17.0						
14	16.0						
15	17.0						
16	18.0						
17	19.0						
18	20.0						
19	21.0						
20	22.0						
21	23.0						
22	24.0						
23	25.0						
24	26.0						
25	27.0						
26	28.0						
27	29.0						
28	30.0						
29	31.0						
30	32.0						
31	33.0						
32	34.0						
33	35.0						
34	36.0						
35	37.0						
36	38.0						
37	39.0						
38							
39							
40							